

78. THE RED-THROATED DIVER. *Colymbus septentrionalis*.

Almost every lake had its pair of these birds, and we collected many eggs.

79. THE GUILLEMOT. *Uria troile*.

We observed one example only.

80. THE BLACK GUILLEMOT (*Uria grylle*) was everywhere to be seen along the coast; the eggs are considered a delicacy by the natives. This bird winters in these latitudes.

81. THE COMMON CORMORANT (*Carbo cormoranus*) abounded on all the islands; and we found them breeding indiscriminately with the following species,

82. THE SHAG. *Carbo cristatus*.

83. THE ARCTIC TERN. *Sterna arctica*.

We shot some specimens of this bird, which breeds the whole way up the west coast of Norway.

84. THE COMMON GULL. *Larus canus*.

85. THE LESSER BLACK-BACKED GULL. *Larus fuscus*.

86. THE HERRING GULL. *Larus argentatus*.

87. THE GREATER BLACK-BACKED GULL. *Larus marinus*.

There were large numbers of these four species on all the neighbouring islands.

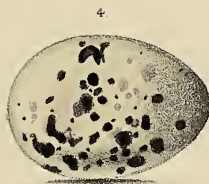
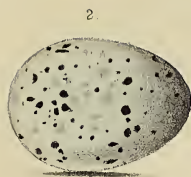
88. RICHARDSON'S SKUA. *Lestris richardsonii*.

First seen May 16th; afterwards abundant, breeding on many of the islands. A pair were also frequently observed on a small marsh near the lake where Eider Duck and Gulls were breeding. Among the many specimens that we preserved, we noticed that the variety of plumage was in no way dependent on the sexes of the birds.

VIII.—*Particulars of Mr. J. WOLLEY's Discovery of the Breeding of the Waxwing (Ampelis garrulus, Linn.).* By ALFRED NEWTON, M.A., F.L.S.

(Plate IV.)

IT is well known to many of the supporters of 'The Ibis' that it had been the intention of the late Mr. John Wolley to con-



EGGS OF AMPELIS GARRULA.

tribute to its pages the particulars of his discovery of the breeding of the Waxwing (*Ampelis garrulus*, Linn.), and that in the spring of 1859 he had selected from his extensive series some specimens of its eggs, which he handed over to Mr. Hewitson,—that gentleman having kindly consented to execute a plate in illustration of the paper. Mr. Wolley's failing health prevented him from carrying out his design, and I have therefore thought it incumbent upon me, as the inheritor of his collection and papers, to supply the deficiency as far as I am able. I shall in a great measure tell the story in his own words, believing that in so doing I shall not only lessen the chance of error, but that thereby I shall best consult the wishes of my readers.

It is unnecessary to repeat here the fabulous accounts given by former writers respecting the nidification of this bird. The very plain statement communicated by Mr. Wolley to the Zoological Society, on the evening of the 24th of March, 1857, is sufficient to set them at rest for ever*. But still I may remark, that from the days of Linnæus (who said of it, "*nidus in rupium antris†*"), downwards, nearly all the conjectures published seem to have been wide of the mark. In years gone by, one of the hardiest of our Arctic explorers, Sir John Richardson, had failed to ascertain anything connected with its breeding in the Fur-countries of the North-West‡, and, more recently, the intrepid Siberian traveller, Dr. A. von Middendorff, was equally unsuccessful in the North-East§. Yet it may be safely said that there was no bird whose egg was so longed for by the oologists of the whole world. Various were the plans they bethought them of for attaining this *desideratissimum*. Many tried to keep

* Proceedings of the Zoological Society, 1857, p. 55. A notice of this paper is inserted in the Athenæum newspaper for April 4, 1857, no. 1536, p. 441, and also in Wiegmann's Archiv für Naturgeschichte, 1858, ii. p. 24; an abstract of it is printed in the Literary Gazette for April 4, 1857, no. 2098, p. 334; and it is published almost entire in the Annals and Magazine of Natural History, 2nd ser. vol. xx., p. 308, and in the Zoologist for 1857, p. 5754. In the "Memoir" of Mr. Wolley, printed in 'The Ibis,' 1860, p. 181, the date is erroneously given "March 26th."

† Systema Naturæ, ed. 13 (*curâ* Gmel.), vol. i. pt. 2. p. 838.

‡ Fauna Boreali-Americana, ii. p. 238.

§ Sibirische Reise, II. ii. p. 157.

pairs of living birds, in the hope of inducing them to breed in confinement. One enthusiastic egg-collector, Baron R. von König-Warthausen, we are told, even went to the trouble of caging a whole flock*. It is true that here and there an oologist might be found, with whom the "wish was father to the thought," and who accordingly deluded himself into the belief that in some unusually large specimen of the egg of the allied species (*Ampelis cedrorum*), or in some queerly-coloured monstrosity of a bird perhaps not at all connected, he recognized a genuine production of *Ampelis garrulus*; but such instances were certainly exceptional, and there can be little doubt that, prior to 1856, no one with any pretension to the title of naturalist had ever set eyes on a real egg or nest of the Waxwing, and that this privilege was reserved for one who of all men eminently merited it. It is due, however, to Scandinavian naturalists to say, that several of them who had travelled in Lapland had expressed themselves confident that the bird did sometimes breed in that country; and though the reports of its nesting, which some of them brought home, have been shown by Mr. Wolley's discovery to have been probably incorrect,† yet it was, I think, reliance on the general fidelity of those gentlemen in matters of this kind which kept alive my friend's hopes of one day finding the long-sought treasure; but hopes they were of a kind so remote, that when they were fulfilled he was justified in speaking of the discovery as "unexpected."

The first intimation I received from Mr. Wolley that the discovery was accomplished was contained in a letter written by him on his way up the Baltic, and dated 2nd Sept. 1856. He says, "Let me tell you now, whilst I think of it, that I have some reason for believing that the Waxwing makes its nest in good-sized fir-trees in the month of June. I give you this hint in case I should not live to give you more certain information;

* Dr. E. Baldamus in 'Naumannia,' 1858, p. 131.

† Compare J. W. Zetterstedt, *Resa gen. Sw. och Norr. Lappm.* i. p. 272. 'Tidskrift för Jägare,' W. von Wright, p. 289; C. U. Ekström, p. 706; G. A. Bergenstråle and J. Holmstedt, p. 726; A. Wigart, p. 1087. L. Lloyd, *Scand. Advent.* ii. p. 312. H. D. J. Wallengren, in 'Naumannia,' 1854, p. 123. S. Nilsson, *Skand. Faun. Foglarna*, ed. 3. i. p. 242.

but you remember that I am not to return home without a Waxwing's nest in my hand." He had, in fact, a few days before, when at Stockholm, received from his faithful Ludwig a letter telling him of the discovery, in which Ludwig had himself assisted, and respecting the truth of which he said, his "Master must be quite sure—without doubt." Mr. Wolley, however, forbore to allow his own or my expectations to be raised too highly, and in spite of his receiving confirmatory evidence on his arrival at Haparanda and on his way up the river, it was not until he had reached Muoniovara, and had satisfied himself by repeated investigation of the whole story, that he trusted himself to write to me positively. His letter, dated "Muoniovara, 14 Sept. 1856," after describing his own doings and those of the friends I had made the preceding year, telling me of the expected scarcity of food, and giving the general results of the nesting season, goes on to say:—

"I have still to tell you of Ludwig's expedition with Piko Heiki to Sardo, on the Kittila River. It was early in June, and he had to wade over Pallas-tunturi up to his middle in snow. Arrived at Sardo, he found the lads there all at home, deep in dirt and laziness. He soon extracted from them the information that a pair of birds had been seen about, which they took to be *Tuka rastas*; and Ludwig himself had seen such a bird, and this bird's egg was entered in my list. * * * Ludwig immediately started off into the forest, and sure enough he saw a bird which he thought was *Sidensvans*; but he was not quite sure, for the end of its tail looked white in the sun instead of yellow as in your picture*: but the next day, or in the evening, it was cloudy, and Ludwig saw the yellow; and now he had no longer any doubt. He said he would give all the lads day-money, and they must all search, even if it were for a week, till they found the nest. They sought all that night and the next day till about midday, [when] a lad called out that he had found the nest; and there it was, with two eggs, about nine feet high, on the branch of a Spruce. * * * After five days

* This picture was one of several coloured sketches of different birds sent to Mr. Wolley by Mr. Hewitson and myself, to assist him in making known his wants to the natives.

Ludwig snared the old bird—a beautiful cock ; and you may fancy with what pleasure I took it in my hand, and saw that there were no doubts remaining. Indeed, I had before been pretty confident about it : Ludwig had written that I might be quite satisfied that it was the right bird. Martin Pekka had the picture with him at Sodankyla, and as soon as he came back Ludwig compared the bird with it, and made certainty doubly sure. The other picture went to Gellivara. * * * I do not expect Waxwings in that quarter. You can fancy how eagerly I waited for Ludwig to produce the eggs. With a trembling hand he brought them out : but first the nest, beautifully preserved ; it is made principally of black ‘tree-hair’ (lichen), with dried Spruce twigs outside, partially lined with a little sheep’s-grass and one or two feathers,—a large deep nest. The eggs—beautiful !—magnificent !!—just the character of the American bird. An indescribable glow of colour about them ! Ludwig had made for them such a box, that even if a horse trod upon it it would not break. He tells me he happened to say that they were most like ‘*Sawi-rastas*’ (Common Thrush), and any one wishing to cheat should try that. The report seems to have spread, without the name of its originator being given ; for in a week or two after, the notorious Sallanki Johan brought a *Korwa-rastas* (Waxwing), ‘shot from the nest,’ with its eggs,—the eggs being, as Ludwig at once saw, Common Thrush’s. The next incident was the arrival of Johan’s brother, the still more notorious Niku, but this time with a couple of young birds scarcely able to fly, which he had caught, as he said, out of a brood of five, by Pallas-tunturi. One of these Ludwig has stuffed, and a rare little beauty it is ; the other was much knocked about, and Ludwig made nothing of it. Then a little girl, just ten days ago, brought three eggs from the other side of Nälina (about twenty-five miles from here), which she said were taken on a certain day in July, and were ‘*Kukhainen*.’ They were undoubted Waxwing, but are very badly blown by her as they were just hatching. At midsummer, Sardio Michel brought in a small batch of *Sidensvans*, with the birds (four in number) to each nest. So now I have a series, though but a very short one, of this *rara avis in terris*—this forerunner of famine, and of infinite value

when one thinks of the uncertainty of getting it again. At the same time I should tell you the Sadio lads found a nest which they believed to have been a last year's *Korwa-rastas*. On this river no one has seen the bird of late years, and very few know it at all. One old fellow, Nalio Aaron, says he saw one north of Nälina in 1853, and another in 1854. Martin Pekka showed the picture to many people in the Sodankyla and Kittila districts, but he could not make out that the bird was at all known, and in all his journey, when he kept a good look-out, he did not see one; so that even this year it seems to have come very sparingly and locally—just in the district north, east, and south of Pallas-tunturi. In 1853 I told you of a boy, Sieppi's Johan, who described a nest of birds he had found some years ago, which, from my interpreter's version, I thought might be that of the Waxwing. This boy, on being shown a skin, said he had never before seen the bird.

"It is a relief to think that I am not bound to go to Russia next spring unless I like it, as I before felt that I was. I almost think I may leave the unbounded riches of the Nova Zembla coasts and of the north of Siberia—their Steller's Duck, Curlew Sandpiper, Little Stint, Knot, Sanderling, Grey Plover, Grey Phalarope—to younger adventurers.

* * * * *

"Almost every day (and it is now the sixth since that of my arrival here) Ludwig has told me the whole story of the *Siden-svans'* nest, and I am never tired of hearing it:—How the season was very backward; how, in their expedition, he and Piko Heiki were getting very much out of spirits at the little success they met with. How he saw this bird in the sunshine. How, when at last the nest was found, he could scarcely believe his eyes; how he went to it again and again, each time convinced when at the spot, but believing it all a dream as soon as he was at a distance. The rising and falling of the crest of the bird, its curious song or voice—all he is eager to tell over and over again; and I have the fullest version, with all the 'I said,' 'Heiki said,' 'Michel said,' 'Ole said,' &c. These Sadio lads, as you have heard me say formerly, have a good knowledge of the small birds of their neighbourhood, but they are none of them sure whether

they have ever seen *Sidensvans* before. As I have also told you, it seemed to be known to a very few wood's-men on that side of the country under the name of '*Korwa-rastas*' or '*Korwa-lintu*' (Ear-bird). It had occasionally attracted their attention, as having feathers on its head standing up like squirrel's ears. It was not till the second year of my stay here that I ascertained this with certainty. The first summer I believed it to be '*Harrhi*,' a bird coming in bad seasons, and properly the Common Jay; but it seems that this name is also really sometimes given to *Sidensvans*, and therefore, as well as for other reasons, I am inclined to believe that the bird is only here very occasionally.

* * *

* * * "The young Waxwing I should wish our old friend Yarrell to describe, for I think it would give him pleasure. He might exhibit a nest and eggs at the same time with a pair of the birds in breeding-plumage to the Zoological Society; but, for special reasons, I should wish the Waxwing not to be talked about till the spring."

Mr. Yarrell's death having prevented Mr. Wolley's wish from being carried out, the announcement of the discovery was communicated to the Zoological Society, in the short though very comprehensive paper I have before alluded to, at their meeting on the 24th March, 1857, the specimens being exhibited by my brother Edward. They consisted of two nests—one of which (the original of the figure in the '*Illustrated Proceedings*'*) was afterwards deposited, with an egg, in the British Museum, while the other was presented (also with an egg) to the museum at Norwich, the authorities of which had for some time past taken a warm interest in Mr. Wolley's researches,—a pair of birds in their breeding-plumage, the nestling before mentioned (all three of which are now at Norwich), and some seven or eight examples of the egg. Of these latter, the two figured in the plate in the '*Proceedings*' were subsequently sold at Mr. Stevens's rooms, and purchased by Sir William Milner, in whose collection they still remain. A third, sold at the same time, became the property of Mr. Henry Walter; and specimens were given to Mr. Wilmot, Mr. W. H. Simpson, and myself.

* *Illust. Proc. Zool. Soc.* 1857, Aves, pl. cxxii.

In all, Mr. Wolley obtained twenty-nine eggs of the Waxwing in 1856. Later on in the autumn, an intelligent Lapp informed him that he remembered having seen a bird some twenty years before, and once or twice since had seen or heard another, but that was perhaps ten years previously. On the other hand, in 1856 he had seen them some half-dozen times, and found a nest, from which, however, the young ones flew. This nest he subsequently brought very carefully, with the branch on which it was built, to Mr. Wolley, by whom it was sent the following year, by the hands of Dr. Edwin Nylander, to the museum of the University of Helsingfors. The Lapp added that in the spring he had observed of the birds that "they flew up in the air, and came and sat in the same spot whence they had flown—he thought in play; but perhaps they were catching insects," as Mr. Wolley himself suggested.

In 1857, it seems that the Waxwing was still more rarely distributed in Lapland than it had been the preceding year. Mr. Wolley was of course exceedingly desirous of taking a nest with his own hands, and for this purpose devoted to the search much of his time before crossing the district hitherto unexplored by him between the Muonio valley and the head-waters of the Tana. In this object he was only partially successful. He writes, "For myself, I could not, in spite of every exertion, get a living Waxwing within range of my pair of eyes. I took a nest which had been deserted a day or two before, and from which something had thrown the eggs, one after another, upon the ground as fast as they were laid; of course, broken to bits. It was close to the house at Sardio. In vain I wandered through the woods, and scarcely shut my eyes at night. Many people were on the look-out; but, after the nest of three eggs I told you of from Jerisjärvi, the only arrival has been a perfect nest of five eggs found by Piko Heiki, whom I desired to give up everything else, and work all the mountain-district for Waxwing." The nest thus taken by Mr. Wolley, and which I intend to retain in my possession, as being the only one taken by him, bears date "16th June, 1857." It was built in a Spruce, and agrees in most respects with those previously seen and described by him. The eight eggs just mentioned were the only ones obtained by

him that year; for, though another nest with five eggs was taken for him by one of his most trusty collectors on an island, Ajos-saari, in the Gulf of Bothnia, near Kemi-suu (the mouth of the Kemi River), the finder was induced to part with it to a Russian traveller for three silver rubles, "the doctor having represented that Mr. Wolley had already as many as he wanted," a statement certainly not in accordance with the facts; for Mr. Wolley had, in giving him a nest, promised that, if he had them to spare the next year, he would transmit specimens of the eggs to the museum at Helsingfors. This same person, whose zeal might have been commendable had it been qualified by either gratitude or good faith, previously informed Mr. Wolley that a naturalist in the Finnish capital had for some time offered a reward of fifty rubles (about £9) for a nest of the Waxwing, and suggested that the Sardinian lads were entitled to the prize: whereupon Mr. Wolley immediately divided that sum (in addition to the some hundred dollars they had already received) among all who were engaged in the glorious affair of the 7th of June, 1856, and at the same time wrote to the University of Helsingfors to say that he could not allow its authorities to pay for his discovery. A brief notice of the booty acquired by Dr. E. Nylander will be found in the Appendix to the last edition of Professor Nilsson's excellent work*, communicated to him by Professor Alexander von Nordmann, who also furnished a more detailed account to the '*Journal für Ornithologie*' for the following year, illustrated with figures from the specimens thus obtained†.

The summer of 1858, when Mr. Wolley was with me in Iceland, was "a great year for Waxwings." Not far from a hundred and fifty nests were found by persons in his employment in Lapland, and some of them close to Muoniovara. It seems, as nearly as I have been able to ascertain, that no less than six hundred and sixty-six eggs were collected; and more than twenty more were obtained by Herr Keitel of Berlin, who happened, without I believe any expectation of the luck that was in store for him, to be that year on the Muonio River. A

* Skand. Faun. Föglarna, ed. 3, i. p. 571.

† *Journal für Ornithologie*, 1858, p. 307; 1859, pl. 1.

detailed account of Herr Keitel's success appeared some months after in the 'Naumannia*,' from the pen of its editor, and the specimens of the eggs figured in that magazine were obtained through him. It is unnecessary for me to go into details respecting the magnificent series of eggs which Mr. Wolley was thus enabled to add to his cabinet. The nests were built mostly in Spruce and Scotch-fir trees (*Pinus abies* and *P. sylvestris*)—chiefly, I think, the former. The usual complement of eggs is certainly five; but six not uncommonly, and seven and four occasionally, were found. The second week of June seems to be the general time for the birds to have eggs; but there are some which must have been laid in the last days of May, and others (perhaps second broods) a month later†. Of the different varieties into which the egg runs, the accompanying illustration (Pl. IV.), in which Mr. Hewitson's able pencil has represented the half-dozen examples I before mentioned as selected by Mr. Wolley, will give a far better idea than anything I can say. I may, however, state that those depicted in figures 1 and 4 are considerably above the average size, and are characterized by a bolder style of blotching than usual. Fig. 2 is perhaps the most typical in appearance, and, except in size, almost exactly resembles an ordinary Cedar-bird's. Fig. 3 displays a somewhat rare variety, in which linear markings, such as are seen in the eggs of many of the *Emberizinae* and *Icterinae*, more or less prevail. Fig. 5 represents a not unusual form with a dull-olive ground-colour, resembling in this respect curiously enough the egg of an Australian bird of the same family, *Pachycephala pectoralis*‡, of which there is a specimen now in Mr. O. Salvin's collection. The example drawn in fig. 6 stands, to the best of my belief, for the variety to which Mr. Wolley in his paper before mentioned applied the term "salmon-colour," which appellation has been demurred to by other naturalists. The matter I think is explained by the fact, which I know from my own intimacy with him, that Mr. Wolley's sight did not fully

* 'Naumannia,' 1858, p. 498. pl. 1. figs. 5-8.

† The American species would seem sometimes to breed much later in the season. Dr. Brewer told me at Boston, August 31st, 1857, that on the preceding day he had seen a Cedar-bird's nest, with eggs still unhatched.

‡ Gould, Birds of Australia, ii. pl. 67.

appreciate the colour red, or clearly determine when red did or did not enter into the composition of another hue. I have now before me a sketch made by him of one of the eggs obtained the first year, in which he has painted the ground of a bright pinky-orange—decidedly salmon-colour; but I have been unable to detect the original of this drawing in any of the eggs of that year, all of which I believe I have at some time or another seen; and of the vast series now in my possession there is not a single specimen which, in my opinion, at all approaches “salmon-colour.” I therefore, knowing how careful he always was in the choice of his words, can only attribute his making use of that term to this slight defect in his vision; and that this defect existed I had proof more than once; and, indeed, on one occasion he told me he had satisfied himself of this tendency to “colour-blindness” where anything like red was concerned. The original of fig. 6 is certainly of a warmer tint than is usually found; but my series is not without several examples of it. I also possess some specimens of a pale and very beautiful variety, almost destitute of dark spots, but with large blotches of tender lilac. Excepting in the case of the American allied species, and the Australian bird before mentioned, I know of no eggs which can be said to bear any *close* resemblance to those of the Waxwing.

This same year (1858) saw an Englishman, however, accomplish what Mr. Wolley only partially succeeded in doing. The interesting account of an independent discovery of the breeding of the Waxwing, with which the kindness of Mr. H. E. Dresser has furnished me, will, I am sure, be read with pleasure, and I leave that gentleman to narrate his exploit in his own language:—

“In 1858 I was a short time in Uleåborg, while on my way from Stockholm *viâ* Torneå to St. Petersburg, and having a little time on my hands, I spent it in company with Mr. John Granberg of Uleåborg, collecting in the neighbourhood of the town. We intended to pass a day or two amongst the small islands near the harbour, and determined to visit one called Sandön, about four Swedish (twenty-seven English) miles from Uleåborg.

“We (that is, Granberg, a student by name Heikel, and myself) left the town on the evening of the 3rd of July, in a little boat,

and sailed to Warjakka, an island outside the harbour, where we provisioned for our trip. We then started for Sandön; but, there being but little wind, did not arrive off the island until about two o'clock in the morning. We grounded at some distance outside, and all three stripped for a swim, to find some deeper water; but, not being able to get the boat much nearer, we made her fast and carried our traps on shore, getting almost devoured by mosquitoes in so doing. We had heard that there was a rough log-hut somewhere on the island, built by the Karlö peasants, who come annually to take away the marsh-grass, and accordingly set off in search of it. We were crossing a small open place when we started a bird, which Granberg, who was on first, said was a Waxwing (*Ampelis garrulus*), and having my gun loaded with dust-shot, I followed it up and succeeded in shooting it. It proved to be an adult female, and had evidently been incubating. We searched all the bushes and trees near, in hopes of finding a nest, but without any success; and as the mosquitoes were very troublesome, we determined to find the hut, take a nap, and continue the search afterwards. We soon did find it, and after smoking out the mosquitoes and stopping up the smoke-hole, turned in on some marsh-grass, and did not awake until pretty late in the day. After breakfast we separated to explore the island; and Heikel and myself, meeting soon after on the opposite side, went on in company, but had no success, only finding a few small birds. * * *

"We had quite given up all hopes of finding the Waxwing's nest, when, as I was crossing a little barren to join Heikel, I saw, in a small pine-tree close to where he was standing, a nest with several young ones in it sitting bolt upright, just as Grebes sit. Going nearer, I instantly knew them to be Waxwings. We threw off our game-bags, and, while he stood below, I climbed up to the nest, which was in the fork between the main stem and the first branch, and not above nine or ten feet from the ground. The moment I touched it, the young ones (five in number) flew out. I jumped down, made a cut at the largest with my cap, and secured him; but Heikel did not get one. Directly the young one which I had caught began to cry out, several Waxwings flew from the neighbouring thicket, all how-

ever keeping out of gunshot except two, which came close round me, and both of which I shot. I then sat down and imitated, as well as I could, the call of the old birds. I was soon rewarded for my trouble by a young one coming out of a Blueberry bush close by and calling lustily. Heikel and I gave chase, and secured him. Granberg, who had heard my two shots, then coming up, we commenced a diligent search for the other three young ones, but had to give it up as hopeless, owing to the thickness of the under-scrub. I then climbed up again and took the nest away carefully, so as to preserve the shape, and to my great delight found one egg in it. We hunted for several hours in the higher part of the island for another nest; but, although we saw about nine old birds, we did not succeed in finding another nest. We did not shoot any more, hoping to find nests there at some future period.

"We returned to Uleåborg the same evening, when I skinned my birds. We ought to have made an equal division of the spoil, but neither Granberg nor Heikel would hear of any division; consequently I have still two old birds and two young ones, besides the nest and egg, in my possession. I regret to say I did not look to see what the young birds had been fed upon; but when I took the nest, I found one or two of last year's dried cranberries in it.

"I arranged with Mr. Granberg for him to go to Sandön in 1859 (for we had kept it secret in the town as to where we had found the nest) to see if he could find another nest; but he wrote to me that, the autumn after we had been there, the chief portion of the forest in Sandön had been consumed by fire, and that it was therefore useless to go there."

I myself had the pleasure of inspecting Mr. Dresser's specimens in 1859 at Mr. Leadbeater's, and I believe I am hardly divulging any confidence when I say they have formed the subject of a beautiful picture, executed under Mr. Gould's superintendence, which I trust will before long be rendered more accessible to the public.

In 1859 the Waxwing bred, but in no great numbers, in the Muonioniska and Kittila districts. Though much sought for, not more than forty-six eggs were obtained by Mr. Wolley's collectors.

During the past summer it seems to have been rather more numerous. I am told of fifty-two eggs having been collected for me by the agents of my late friend, whom I keep in my own employment, but these specimens have not hitherto arrived. Early in the present year, Mons. C. F. Dubois described and figured the egg of the Waxwing in the 'Revue et Magasin de Zoologie *,' but without stating whether his example had been obtained from Mr. Wolley, or derived through another source. M. Dubois states that its egg "ressemble beaucoup à celui du *Coccothraustes vulgaris* et du *Lanius ruficeps*; il peut facilement être confondu avec les œufs de ces derniers." In this latter assertion I do not agree with him. Out of the several hundred specimens which form the series I possess, there is not one, I think, which could be taken for that of either the Hawfinch or the Woodchat Shrike, though I freely admit there is a likeness to the eggs of both†.

Thus much have I to record of the particulars of this discovery, which, I think, had been looked forward to by collectors all over the world as by far the most interesting that could be made. It is indeed somewhat surprising that the nidification of a Passerine bird generally known throughout the greater part of three quarters of the globe, and which had been sought for even in its most inhospitable regions once and again by the most venturesome of voyagers, should so long have remained enveloped in mystery. But I also think that few of his brethren in science will grudge the original finder the honour he merits; and writing these words as I do on the first anniversary of the day which saw his removal from amongst us, I do not hesitate to declare my belief that no one of the many earnest fellow-workers with whom it is my privilege to be associated better deserved a

* Revue et Magasin de Zoologie, Février 1860, p. 64. pl. 2. fig. 4 (mis-called on plate "*Bombycilla cærulea*").

† Since the above was in type, I have seen No. 1, for 1860, of the 'Bulletin de la Société Impériale des Naturalistes de Moscou,' which contains an interesting notice by Prof. Alex. v. Nordmann of the Birds of Finland, as observed by his son Arthur. It is therein mentioned (page 21) that the Helsingfors Museum contains five nests, with eggs, of the Waxwing, and that "*Studiosus Malmgren*" had brought its young from Kajana.

distinction than did John Wolley that which this one discovery will always associate with his name.

Elveden, 20th November, 1860.

IX.—*Recent Ornithological Publications.*

1. ENGLISH PUBLICATIONS.

THE 30th number of Mr. Bree's work is just issued, and completes the second volume of 'The Birds of Europe not observed in the British Isles.'

2. FRENCH PUBLICATIONS.

We have received the 'Revue et Magasin de Zoologie' up to No. 10 for 1860. Dr. Sacc's article "sur les Poules de Nankin dites de Cochinchine" (p. 329 *et seq.*) contains more economical than zoological information concerning this exaggerated variety of the Domestic Fowl, which seems to have originated in the warmer portions of the interior of China. Like the Chinese Sheep, its great value consists in its extreme prolificness. In 1858, Dr. Sacc informs us, the number of eggs laid by five pairs of Cochinchinas amounted to no less than 732, or 146 for each hen! In their essay "on the Birds of New Caledonia," in Nos. 9 and 10,* MM. Jules Verreaux and Des Murs have made an important contribution to our knowledge of geographical distribution, and have also introduced us to the acquaintance of several novel and interesting forms. Their article is founded on materials furnished by a collection of the natural products of this new French colony, made under the superintendence of M. Saisset, commander of the French naval forces in the Pacific, which has been deposited in the "Exposition des produits des colonies," now on view in the Palais de l'Industrie in the Champs Elysées at Paris. The series of birds there exhibited, taken in connexion with the species indicated by previous authorities on the subject*, give us the number of 76 species now ascertained as belonging to the Avifauna of New Caledonia; of which no less than 45 are, as far as is hitherto known, pecu-

* Scclater in 'Ibis,' 1859, p. 27, and G. R. Gray in Proc. Zool. Soc. 1859, p. 160.